fascid albá ab oculi posteriore angulo latd circumdatd; nigrá cristd rectd et erectd; occipite ferrugineo-rufo; pectore cæruleo-griseo; abdomine superiore cervino, medio nigro, inferiore tectricibusque caudæ inferioribus arenaceis; plumis ad latera castaneis, mediis

sed pogoniis stramineo-albis.

Forehead, chin and throat deep velvety black, encircled from the posterior angle of the eye with a broad line of white; across the head and passing down behind the eye another line of white, bounded posteriorly with black; crest straight, erect, and of a deep black; occiput rusty red; feathers of the sides and back of the neck lanceolate in form and of a blue-grey, encircled all round with brown; back, wings, rump and upper tail-coverts olive-grey; tertiaries edged with buff narrowly on their outer webs and broadly on their inner ones; tail grey; chest blue-grey; upper part of the abdomen buff; centre of the abdomen black; flank-feathers rich chestnut, with a line of buffy white down the centre; lower part of the abdomen and under tail-coverts sandy buff, with a broad stripe of greyish brown down the centre of each of the latter; bill black; feet brown.

Total length, $8\frac{3}{4}$ inches; bill, $\frac{11}{16}$; wing, $4\frac{1}{2}$; tail, 4; tarsi, $1\frac{3}{8}$;

middle toe and nail, 13.

Hab. Supposed to be California.

Remark.—I am indebted to the kindness of M. Louis Coulon, Director of the Museum at Neufchâtel, for the loan of this species, for the purpose of figuring in my monograph: it is the only specimen I have seen, and in all probability is the only one that has been sent to Europe; it is a bird whose rarity is only equalled by its beauty: it is very nearly allied to Callipepla Californica, but is distinguished from that bird by the straight form of the crest, the rich colouring of the flank-feathers, by the absence of the scale-like markings of the abdomen, and the greater length of the tail.

ENTOMOLOGICAL SOCIETY.

May 5th, 1845.—The Rev. F. W. Hope, President, in the Chair.

Captain Parry exhibited a small collection of insects chiefly from New Holland; also an exotic *Curculio*, with two long *Clavariæ* springing from the elytra and thorax.

The President exhibited a large Ant Lion in spirits from the plains

of Marathon.

Mr. C. Lamb exhibited a specimen of Deinacrida heteracantha in

spirits, remarkable for its immense mandibles.

Mr. S. Stevens described a plan of setting the wings of moths so as to give them a curved and somewhat deflexed appearance, by cutting a groove down the centre of the narrow setting-board (in which the body of the insect is lodged), and giving the sides the proper deflexed curve.

The following papers were read:—

"On the genus *Holoparamecus* of Curtis." By J. O. Westwood. After detailing the history of the establishment of this genus, and its identity with the genera *Calyptobium*, Villa, *Amphibolonarzron*,

Porro, and Latrinus, Walk., and the various observations made upon it by Messrs. Curtis, Aubê and Guérin-Meneville, the author shows its affinity to Latridius and Mycetæa, alluding especially to the remarkable circumstance, that some of the species possess nine joints to the antennæ, another ten, and another eleven. Whereupon Mr. J. F. Stephens stated, that he had taken species of this genus on the wing

at Hertford, Camberwell and South Lambeth.

"Notes on the supposed Sense of Pain in Insects." By Mr. C. Boreham; of which the following is an abstract. On pinning two moths (one through both the thorax and abdomen) in the daytime, they remained immoveable until their usual time of flight in the evening; whilst a peacock-butterfly pinned just before sunset was found early next morning as perfect as when left, and on removing the pin it flew away. Some beetles on being pinned at first remained for a short time inanimate, and then struggled violently as if endeavouring to escape from confinement: a specimen merely confined by a brace across the body performed the same motions. From three specimens of the common house-fly, engaged in cleaning their forefeet, he cut off one of the hind-legs, whereupon two of the insects continued the action without any signs of inconvenience, as did also the third, after moving a few inches.

Mr. C. Lamb stated that he had observed, that *Coleoptera* when stuck with a pin which is subsequently removed die shortly afterwards; but the President stated, that he had observed that the species of *Colymbetes* possess the power of repairing the injury done

to the elytra by piercing them.

June 2nd.—The Rev. F. W. Hope, President, in the Chair.

Mr. Weir exhibited a fine specimen of the male of *Dorthesia Characias*, remarkable for the long white filamentous tuft at the extremity of the body.

Mr. S. Stevens exhibited living specimens of Rhynchites cupreus from Black Park, Bucks, and also from the north of England, taken on the flowers of the mountain ash, in company with Molorchus minor.

Mr. Douglas exhibited an apparently new species of Orthotania,

recently taken amongst heath at West Wyckham.

Captain Parry exhibited a box of *Coleoptera* from China and the Himalayas, including several fine *Lucani*, and a new species of *Trictenotoma**.

The Rev. F. W. Hope brought under the notice of the meeting the destruction caused by white ants and other insects to the wooden sleepers used in the railroads in India, and reference to the kyanizing process having been made, Mr. J. F. Stephens stated, that on one occasion he had taken a number of specimens of *Thanasimus unifas*-

* Trictenotoma ænea, Parry MSS. Nigra subnitida, elytris æneis, versus suturam cupreis, pubescentid tenui albidd obtecta, prothorace utrinque pone medium spind acutd armato; mandibulis porrectis, lateribus extus subsinuatis. Long. corp. cum mandibulis ferè unc. 3.—Hab. in India orientali prope montes Himalayanas. Mus. Parry.—J.O.W.

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ciatus on palings at Camberwell, but that none were found on adjacent palings which had been kyanized.

The following papers were read:-

"Descriptions of two new genera of Carabida." By J. O. Westwood.

Helluodes, Westw. Genus novum Helluoni proximum, habitu vero Morionis cum trophis Anthiarum. Caput maximum (prothorace multò majus); mandibulæ porrectæ, acutæ, intus inermes; maxillæ elongatæ, apice subunguiculatæ; palpi interni valdè curvati; externi maxillis vix duplò longiores; mentum in medio valdè emarginatum; labium angustum, elongatum; palpi labiales articulo ultimo præcedente multò minori; prothorax truncato-cordatus, marginatus; elytra depressa; pedes mediocres; tibiis anticis intus ante apicem emarginatis; tarsorum articulo 4to simplici.

Helluodes Taprobanæ, Westw. Niger nitidus, labro femoribus apiceque abdominis piceo-rufis. Long. corp. lin. 15.—Hab. in

Insulâ Taprobanæ. In Mus. D. Melly.

PLATYNODES, Westw. Genus (vel potius subgenus) novum Morioni proximum. Corpus magnum, latiusculum, depressum; caput magnum, planum, lævissimum, anticè bi-impressum, clypeo emarginato; labrum parvum, quadratum, anticè valdè emarginatum; mandibulæ magnæ, intus versus medium obtusè dentatæ; maxillæ et instrumenta labialia ut in Morione orientali; antennæ breves, compressæ, articulis apicalibus parcè setosis; pronotum capite brevius, longitudine latius; cordato-truncatum marginatum, stristenui media impressa impressionibusque duabus ad angulos posticos; elytra lata, depressa, lævia, striis paucis tenuibus impressa, costaque tenui ex humeris ferè ad apicem ducta; pedes mediocres; tarsis brevibus, ut in Morione.

Platynodes Westermanni, Westw. Niger lævis subnitidus, capite nitidissimo; labro et antennis piceis; elytris striis tenuissimis æqualibus, serieque punctorum intra margines laterales instructis. Long. corp. lin. 12 (mandibulis exclus.).—Hab. in Guineâ.

Mus. Westw. A Dom. Westermanno communicatus.

An extract from a letter from Captain Boys addressed to Mr. Westwood, containing notes on the habits of the genera *Dorylus*,

Ascalaphus, &c. was also read.

"Dorylus," he states, "is certainly more closely allied to Formica than to Mutilla, as far as the little experience I have had holds good." In a house in which Captain Boys resided at Gorruckpore, "a nest of these insects was located; and one evening they swarmed to such an extent as to become a perfect nuisance. A small orifice was discovered in the flooring (brick and earth plastered) immediately beneath the dining-table, from which hundreds were escaping. Those with wings after moving about a few seconds took flight; the apterous ones (which were no bigger than a common house-fly, or smaller), and to me appearing true ants, remained swarming, and entering in and out in the same manner as ants on a sunny day. This was at night. I collected a host of both kinds: I can therefore say positively that they live in society, excavate nests in the earth, and to the best of my belief are divided into neuters and workers."

A specimen was forwarded with this communication of Acrydium (Tetrix, Latr.) Harpago, Serville, with the observation, that the insect is a true swimmer; the formation of its posterior legs might alone lead one to make a shrewd guess of the fact. It is found abundantly near the waterfalls at Mhow in Malwa, frequenting the sedges on the banks of the stream. He had often seen them swim under water from one bank to the other, a distance of three or four yards; and they had several times tried his patience by remaining under water attached to a stone. He had constantly observed a small, silver-like bubble of air on each side of the thorax close under the base of the lengthened scutellum, and not unfrequently a third at its apex (as is seen at the caudal extremity of the Dytisci). They swim with rapid strokes of both posterior legs thrown out together, and at no small pace, turning as freely as a Gyrinus when a capture is attempted. Occasionally they will walk steadily down a reed some feet under water, and there appear to feed on the small weed which is attached to it. The steps of the bathing-ghat, from which the water had receded, being covered with the above-mentioned weed, were a fine field for them. Of their mastication of this weed he had repeated opportunities of witnessing; but they seemed to prefer that which was submerged, as they were more abundant on the steps below water except where basking in the sun.

Of a species of Ascalaphus remarkable for its short dilated abdomen, long and very clavate antennæ, and yellow maculated body, the writer observes that he had often found the perfect fly on tall grass knee-deep in water, whence he suspects that the larva may be aquatic. The Ascalaphi and Myrmeleones when captured emit a very offensive smell. He had obtained twelve or fourteen species of Lucanus from the vicinity of Almorah in the Himalayan mountains, generally found feeding upon rotten fungus, but had never taken any species in the plains. He had also captured a Megacephala

(apparently identical with M. euphratica) at Nusseerabad.

A species of *Embia* was also forwarded, with the observation that it was not uncommon; but that its habits were remarkable, as it elaborates a kind of web from the mouth under which it conceals itself. He had also captured four species of bees whose habits whilst at rest are curious, since at that time they hold on to a twig by the mandibles with the body stretched out at right angles from it, without any support from the legs, which are drawn up close to the body. Specimens of these insects were not forwarded, so that the genus cannot at present be determined.

July 7th.—The Rev. F. W. Hope, President, in the Chair.

Mr. Edward Doubleday exhibited a case of nocturnal *Lepidoptera* from Sydney, including three species of *Oiketicus*, a new species of the genus *Doratifera* (with drawings of its preparatory states, and of which the larva stings very acutely when touched), and other new and interesting species.

Mr. Westwood exhibited two monstrosities in the male of the honey-bee, in one of which the two hind-feet were not more than a

fourth of the normal size (this being a case of retarded development), and in the other the left antenna was abbreviated with some of the

joints coalescing and internally serrated.

Mr. Desvignes exhibited specimens of *Eupithecia togata*, Hubn., a species new to this country, which had been taken at Black Park, Bucks, in the middle of the preceding June. Likewise a very dark variety of *Hemerophila abruptaria*.

Mr. J. F. Stephens exhibited specimens of the rare Anarta vidua and cordigera, and Psodos trepidaria, recently captured by Mr.

Weaver in Scotland.

Mr. Weir exhibited specimens of both sexes of *Ino globulariæ* from Lewes, the female being now for the first time noticed in this country.

Mr. Frend exhibited specimens of the larvæ, pupæ and imago of *Prionus coriarius*, and observed that it only requires fourteen days to

pass from the first to the last of these states.

Mr. W. W. Saunders exhibited several new Australian species of

Longicorn beetles allied to Molorchus, from Hunter's river.

Mr. Westwood exhibited a specimen of *Trictenotoma Childrenii*, and pointed out the distinctions between it and Captain Parry's new species from the Himalayas, exhibited at the present meeting. He also pointed out the peculiarities in the structure of the lower parts of the mouth of this genus, which had not been previously described.

A description of the male of Gastroxides ater, an Indian species of Tabanidæ, was read by W. W. Saunders, Esq., F.L.S. This sex differs in having the head broader than the thorax, with the eyes large and vertically contiguous, and in having a broad rufous band across the abdomen, occupying the apex of the first, the whole of the second and the base of the third joints. The female was described by Mr. Saunders in the third volume of the Transactions of the Society; and the male now described is in the collection of Colonel Hearsey.

Extracts from a letter addressed by Captain Boys to Mr. Saunders were also read, containing a notice of the *locusts* of India, and of a new species of *Idmais* (belonging to the *Pierideous Butterflies*).

MISCELLANEOUS.

Description of a new species of Bat from Western Africa, Pteropus Haldemani. By Edward Halowell, M.D.

GENERAL expression ferocious; head resembling that of a dog; ears of moderate size, smooth for the most part, obtuse at the tip, hairy at base externally; there is no tragus; body dark brown above; neck, occiput and vertex same colour, but lighter than upon the back; wings and interfemoral membrane of a sienna-brown colour above and below; thorax and upper part of abdomen and sides brown; the rest of the abdomen is white; there are two long and thin hairs upon the muzzle; lips full, nostrils prominent, their margins being surrounded by a fold of the skin; eyes rather large, irides——; wings long; that portion of the membrane included between the phalanges naked, the remainder more or less hairy above